

V. *Description of a Plant yielding Afa foetida. In a Letter from John Hope, M. D. F. R. S. to Sir Joseph Banks, Bart. P. R. S.*

Read December 9, 1784.

TO SIR JOSEPH BANKS, BART. P. R. S.

SIR,

Edinburgh, August 18, 1784.

I BEG you will do me the honour of presenting the inclosed account of the Afa foetida, and the botanical description of the plant, with the drawings, to the Royal Society.

I have the honour of being, with much respect and esteem, &c.

JOHN HOPE.

A S A F O E T I D A.

PLANTA umbellifera, tripedalis, erecta, ramosa, glauca,
flore luteo.

Radix perennis.

Folia radicalia sex, procumbentia, trilobo-ovata, multoties
pinnatim divisa; foliolis incisis, subacutis, sub-
decurrentibus; petiolo communi superne plano, linea
elevata longitudinaliter per medium decurrente.

Caulis bipedalis, erectus, teretiusculus, annuus, leviter stria-
tus, glaber, nudus præter unam circa medium fo-
liorum imperfectorum conjugationem; petiolo mem-
branaceo, concavo.

Rami nudi, patuli; quorum tres inferi, alterni, sustinentur
singuli folii imperfecti petiolo membranaceo con-
cavo.

Quatuor intermedii verticillati sunt. Supremi ex apice
caulis octo, quorum interni erecti.

Omnes hi rami summitate sustinent umbellam com-
positam sessilem terminalem, et præterea 3—6 ramulos
externe positos, umbellas compositas ferentes.

Hoc modo, rami inferiores sustinent 5, raro 6 ramulos;
intermedii 3 vel 4; superiores 1 et 2.

CAL. *Umbella universalis* radiis 20—30 constat.

— *partialis* flosculis subsessilibus 10—20.

Umbella composita sessilis convexo-plana.

— — — pedunculata hæmispherica.

Involucrum universale nullum.

— — — *partiale* nullum.

Periantbium proprium vix notabile.

COR. *universalis* uniformis.

Flosculi umbellæ sessilis fertiles.

— — — pedunculatae plerumque abortiunt.

propria petalis quinque æqualibus, planis, ovatis: primo
patulis, dein reflexis, apice ascendentे.

STAM. *Filamenta* 5, subulata, corolla longiora, incurvata. *An-*
theræ subrotundæ.

PIST. *Germen* turbinatum, inferum.

Styli duo, reflexi.

Stigmata apice incrassata.

PER. nullum : fructus oblongus, plano-compressus, utrinque 3 lineis elevatis notatus est.

SEM. duo, oblonga, magna, utrinque plana, 3 lineis elevatis notata.

Planta odorem alliaceum diffundit. Folia, rami, pedunculi, radix, truncus, secti succum fundunt lacteum, sapore et odore Aſa fœtidæ.

THOUGH Aſa fœtida has been used in medicine for many ages, having been introduced by the Arabian physicians near a thouſand years ago ; yet there was no ſatisfactory account of the plant which yielded it, till KÆMPFER published his *Amoenitatis Exoticæ* about ſeventy years ago.

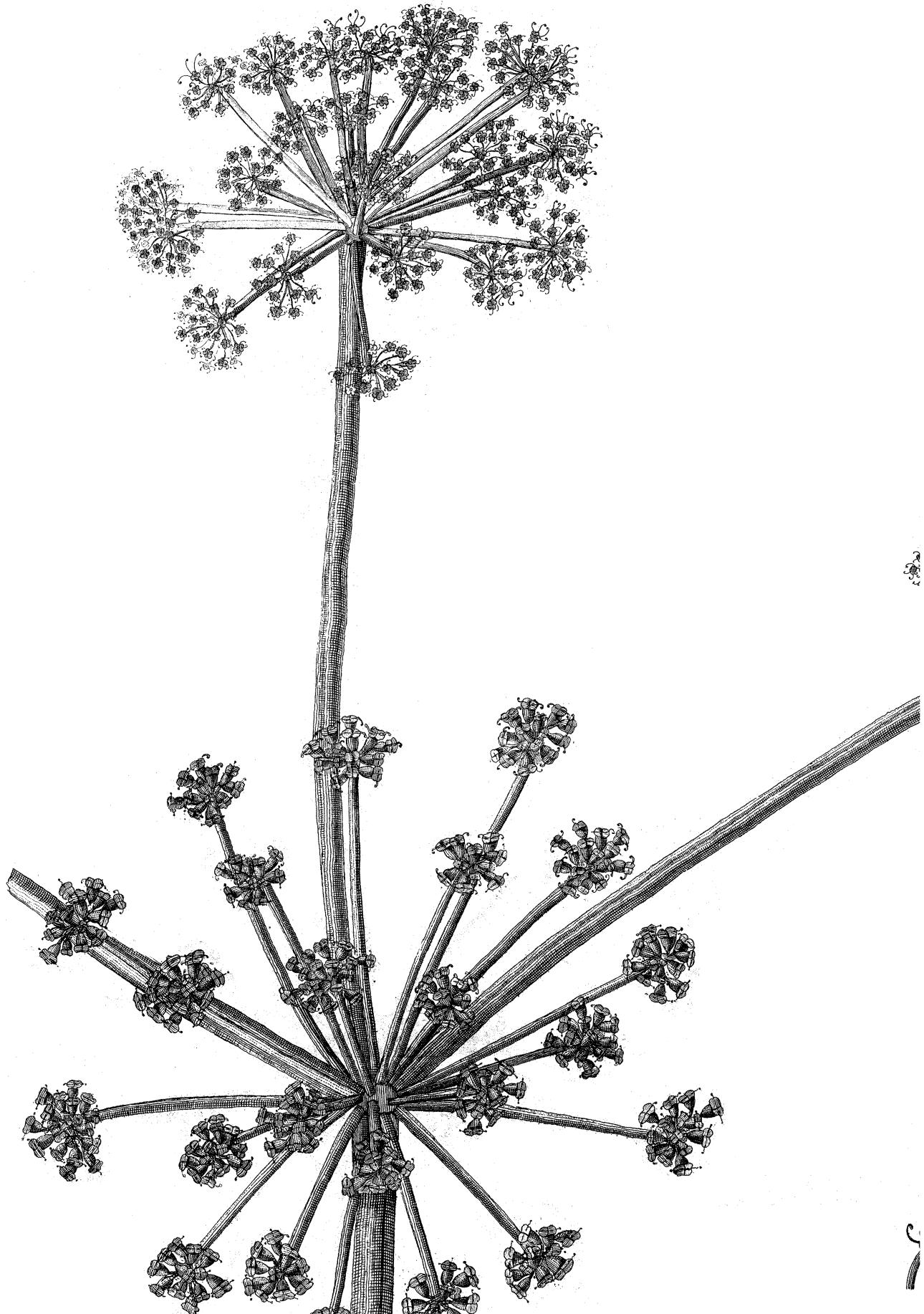
KÆMPFER, towards the end of the laſt century, travelled over a great part of Asia, and was in Persia, and upon the ſpot where the Aſa fœtida is collected. He gives a full account of the manner of collecting it. He describes the plant ; and also gives a figure of it, differing in many respects from thoſe which I now preſent to the Society *.

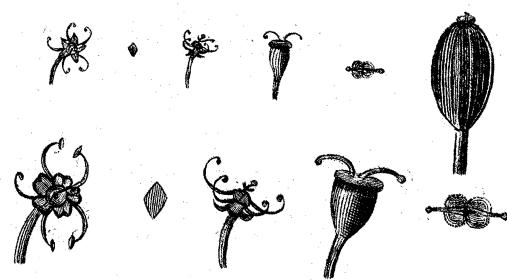
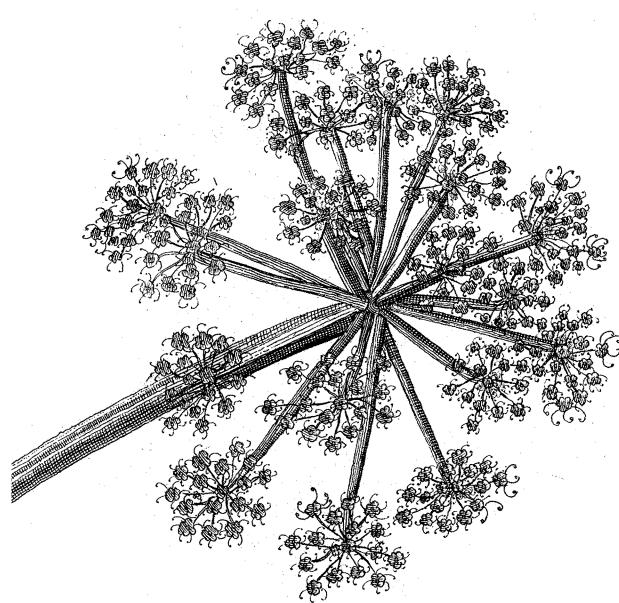
Six years ago, I received from Dr. GUTHRIE, of St. Petersburg, F. R. S. two roots of the Aſa fœtida, with the following card from Dr. PALLAS, addreſſed to Dr. GUTHRIE :

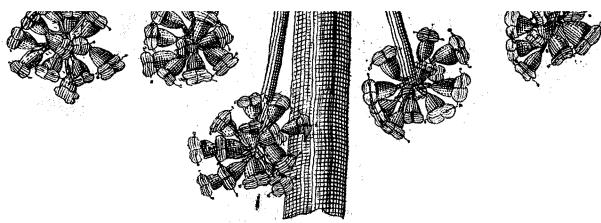
“ Dr. PALLAS’s compliments to Dr. GUTHRIE ; he ſends
“ him two roots of the Ferula Aſa fœtida, a plant which he

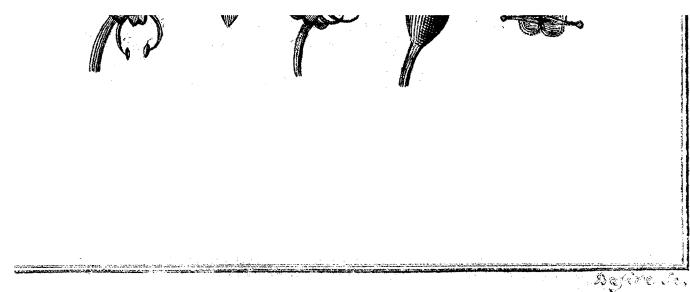
* Probably KÆMPFER’s Aſa fœtida Plant is a diſtinct ſpecies from that deſcribed by Dr. HOPE in this paper. KÆMPFER was himſelf upon the mountains where the drug is collected, and his fidelity in deſcribing, as well as delineating, has not hitherto been impeached. Sanguis Draconis, and ſome other gums, are indifferently the produce of various ſpecies of plants ; and why may not Aſa fœtida be ſimilariſtly circumſtanced ? Jos. BANKS.

“ thinks

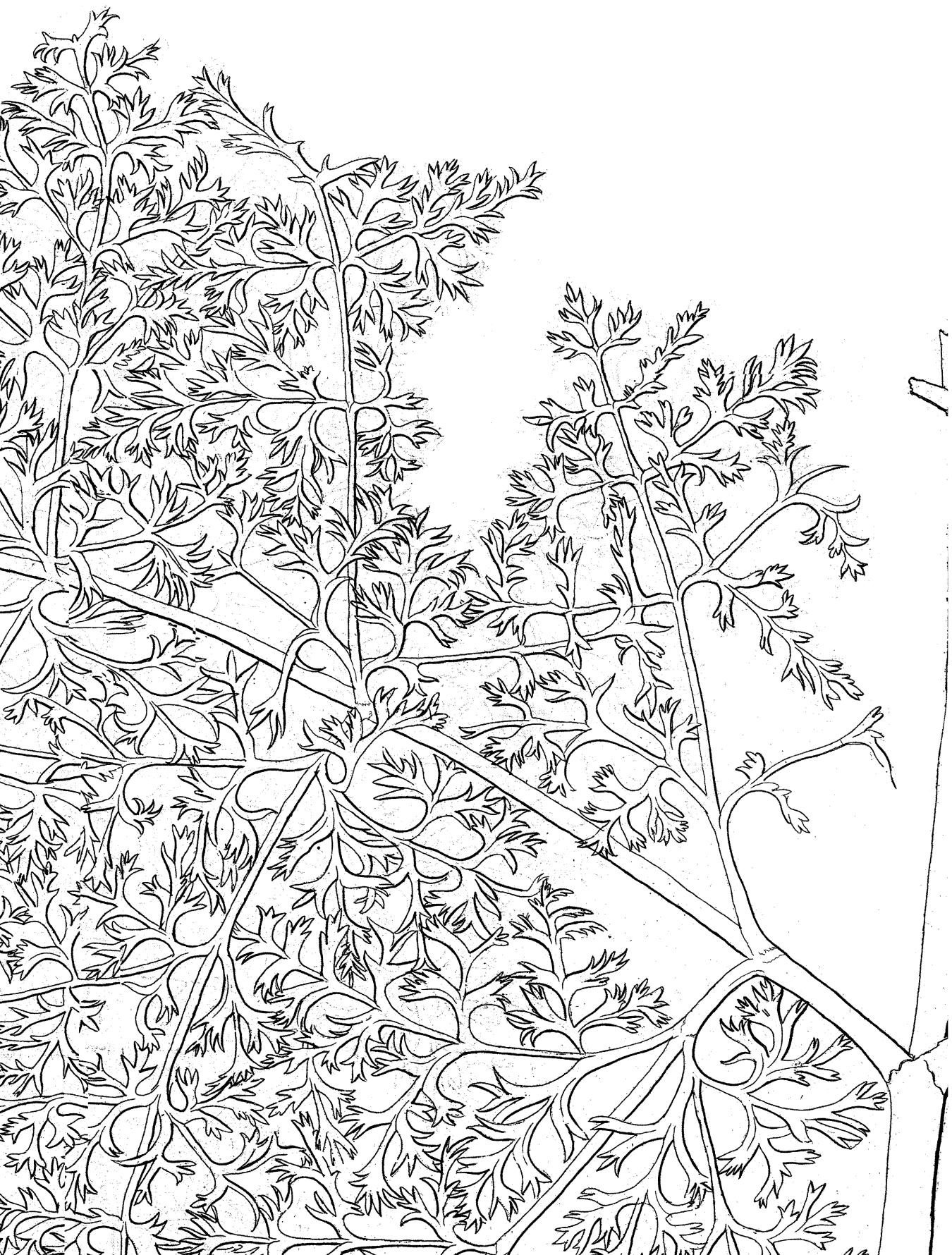


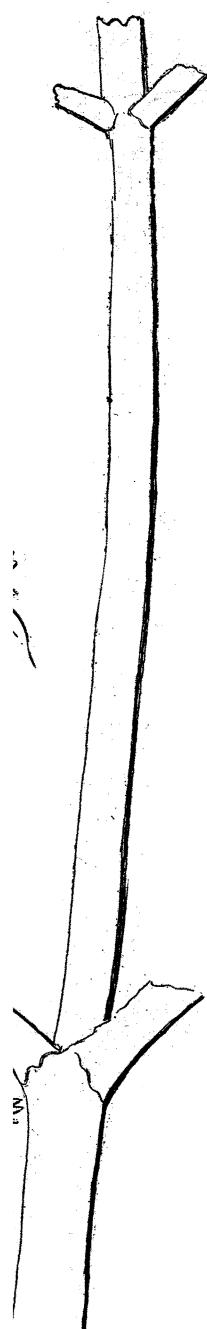


















“ thinks never was cultivated in any European garden, and
“ which nobody has been so fortunate as to raise from seed but
“ himself, though the seeds sent to the Academy from the
“ mountains of Ghilan in Persia had been distributed among
“ several curious persons.”

Both these roots were planted in the open ground, in the Botanic Garden at Edinburgh; one died; the other after some time did well, and last summer flowered and produced seed. I had an accurate drawing of the plant made by Mr. FIFE, which I now have the pleasure of laying before the Society. It expresses very well the general habit of the plant, which was of a pale sea-green colour, and grew to the height of three feet. The stem is deciduous, but the root is perennial. Every part of the plant, when wounded, poured out a rich milky juice, resembling in smell and taste Aſa foetida; and at times a smell resembling garlick, such as a faint impregnation of Aſa foetida yields, was perceivable at the distance of several feet.

In Persia, at the proper season, the root is cut over once and again; from the incisions there flows a thick juice like cream, which, thickened, is the Aſa foetida.

I have only further to observe, that as the plant grows in the open air, without protection, and even in an unfavourable season produced a good deal of seed, and as the juice seems to be of the same nature with the officinal Aſa foetida, there is some reason to hope, that it may become an article of cultivation in this country of no inconsiderable importance.

Edinburgh, Jan. 1783.



